Beach
10/539122

cefdinir as multicomponent scr 2127


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=> scr 2127
L5    SCREEN CREATED

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ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:.
ENTER SCOPE OF SEARCH (SAMPLE), FULL, RANGE, OR SUBSET:subset
ENTER SUBSET L# OR (END):14
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):ful
FULL SUBSET SEARCH INITIATED 14:25:51
FULL SUBSET SCREEN SEARCH COMPLETED                    33 ANSWERS
SEARCH TIME: 00.00.01

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L2                STR
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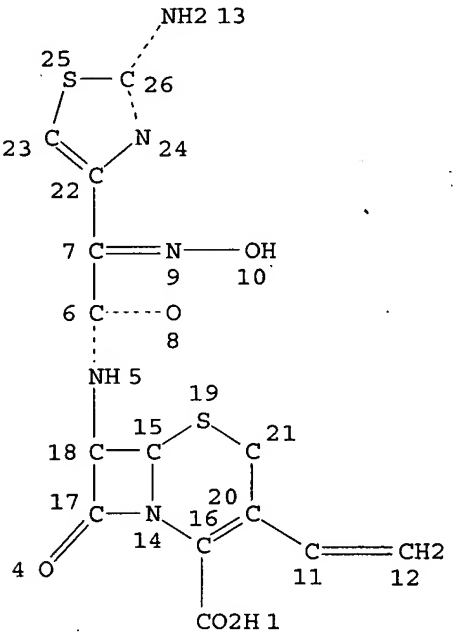


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DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS  24

STEREO ATTRIBUTES: NONE
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L5               SCR 2127
L6            33 SEA FILE=REGISTRY SUB=L4 SSS FUL L5

FULL SUBSET SCREEN SEARCH COMPLETED                    33 ANSWERS
SEARCH TIME: 00.00.01


=> fil caplus;s l6

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	223.66	223.87

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FILE COVERS 1907 - 3 Mar 2006 VOL 144 ISS 11
FILE LAST UPDATED: 2 Mar 2006 (20060302/ED)

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http://www.cas.org/infopolicy.html

L7 26 L6

=> d 1-26 ibib abs hitstr

L7 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:122978 CAPLUS
DOCUMENT NUMBER: 144:198746
TITLE: Preparation of stable amorphous cefdinir
INVENTOR(S): Sever, Nancy E.; Law, Devalina
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 18 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

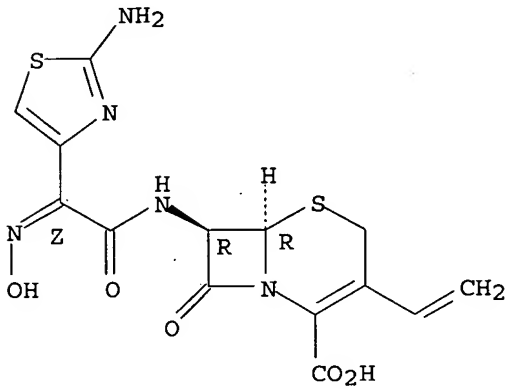
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2006029674	A1	20060209	US 2005-103183		20050411
PRIORITY APPLN. INFO.:			US 2004-560957P	P	20040409

AB The present invention relates to prepns. of stable amorphous cefdinir (7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid, syn isomer), methods for its preparation, and pharmaceutical compns. comprising the same. Amorphous cefdinir was isolated by evaporating a methanolic solution of cefdinir hydrate. The amorphous material was phys. stable.
IT **213978-34-8**, Cefdinir monohydrate
RL: RCT (Reactant); RACT (Reactant or reagent)
(stable amorphous cefdinir)
RN 213978-34-8 CAPLUS

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monohydrate, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



● H_2O

L7 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:103545 CAPLUS
DOCUMENT NUMBER: 144:177431
TITLE: Preparation of crystalline anhydrous cefdinir and crystalline cefdinir hydrates and uses for treating bacterial infection
INVENTOR(S): Law, Devalina; Henry, Rodger F.; Lou, Xiaochun
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of U.S. Ser. No. 72,568.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2006025399	A1	20060202	US 2005-177202		20050708
US 2005209211	A1	20050922	US 2005-72568		20050303
PRIORITY APPLN. INFO.:			US 2004-553643P	P	20040316
			US 2005-72568	A2	20050303

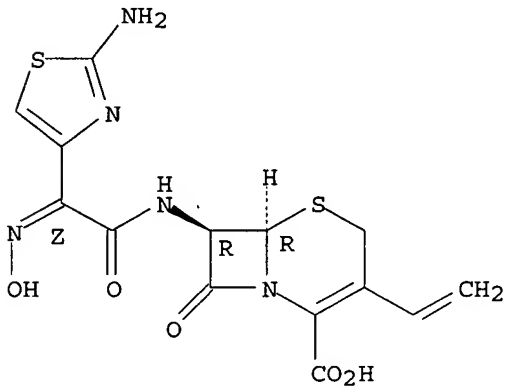
AB The present invention relates to a novel crystalline cefdinir anhydrate and novel crystalline cefdinir hydrates, ways to make them and use them, compns. comprising them and made with them, and methods of treating bacterial infection by using them.

IT **864876-37-9P 874619-80-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of crystalline anhydrous cefdinir and crystalline cefdinir hydrates and uses
for treating bacterial infection)
RN 864876-37-9 CAPLUS

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, hydrate (2:7), (6R,7R)- (9CI) (CA INDEX NAME)

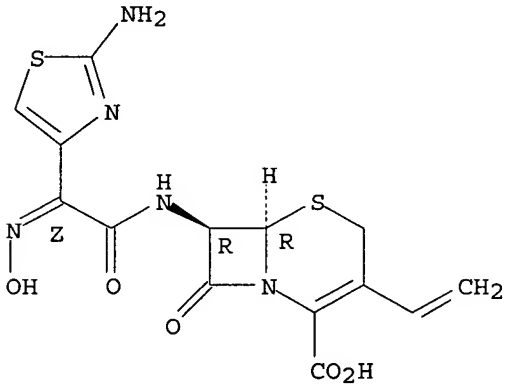
Absolute stereochemistry.
Double bond geometry as shown.



●7/2 H_2O

RN 874619-80-4 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.
Double bond geometry as shown.



●3/2 H_2O

L7 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:100935 CAPLUS
DOCUMENT NUMBER: 144:170819
TITLE: Cefdinir polymorphic forms, and imidazole salt
INVENTOR(S): Jaweed Mukarram, Siddiqui Mohammed; Khan, Rashid Abdul Rehman; Mane, Avinash Seshrao

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

PATENT ASSIGNEE(S): Wockhardt Limited, India
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006010978	A1	20060202	WO 2004-IB2171	20040630

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: WO 2004-IB2171 20040630

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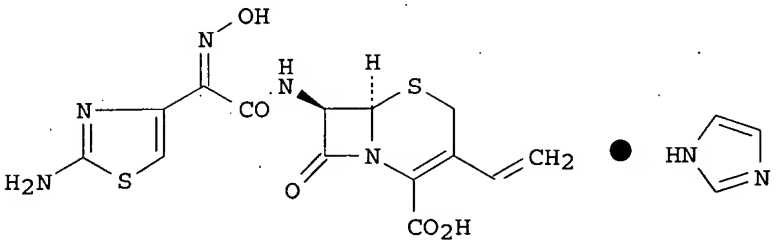


I

AB A new crystalline Cefdinir imidazole salt (I) and polymorphic forms C, D and an amorphous form of Cefdinir were disclosed.

IT **874478-96-3P**, Cefdinir imidazole salt
RL: PRP (Properties); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of the Cefdinir imidazole salt and amorphous and polymorphic crystalline forms C and D of Cefdinir, a β-lactam antibiotic)

RN 874478-96-3 CAPLUS

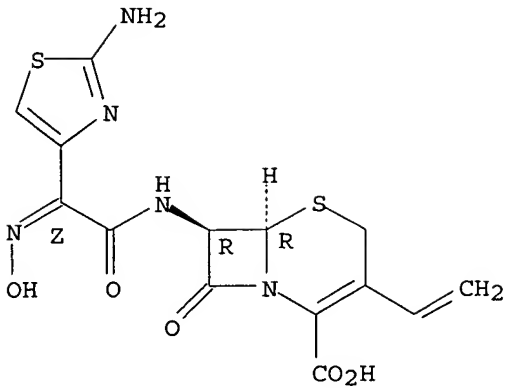
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with 1H-imidazole (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 91832-40-5
CMF C14 H13 N5 O5 S2

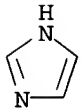
Absolute stereochemistry.
Double bond geometry as shown.

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86



CM 2

CRN 288-32-4
CMF C3 H4 N2



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:54564 CAPLUS
DOCUMENT NUMBER: 144:128794
TITLE: News salts in the preparation of cephalosporin antibiotics
INVENTOR(S): Senthilkumar, Udayampalayam Palanisamy; Lakshmipathi, Venu Sanjeevi; Andrew, Gnanaprakasam; Chandrasekaran, Ramasubbu; Nagender Rao, Dindigala; Om Reddy, Gaddam
PATENT ASSIGNEE(S): Orchid Chemicals & Pharmaceuticals Limited, India
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006006040	A2	20060119	WO 2005-IB1888	20050704

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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: IN 2004-CH637 A 20040705

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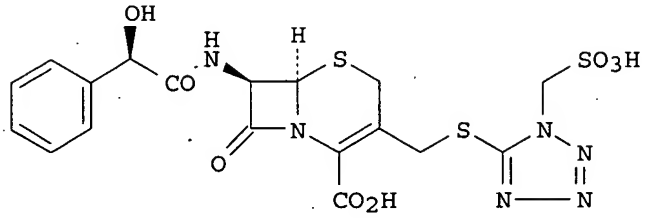
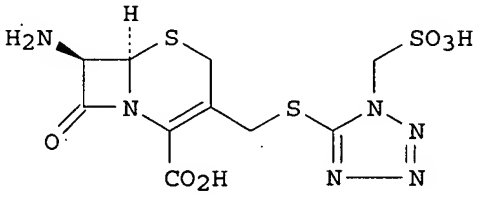


I



II

AB The present invention relates to an improved process for the preparation of cephalosporin antibiotics via the formation of intermediate diamine salts of the general form Cp.nM [Cp = cephalosporin antibiotic, such as Cefdinir, Cefoxitin, Cefonicid, etc.; M = ethylenediamine derivative, such as N,N'-diisobutyl-, N,N'-dicyclohexyl-, N,N'-diisopentyl-, N,N'-di(p-anisyl)-, N,N'-dicyclopentyl-, N,N'-di(p-tolyl)-1,2-ethanediamine; n = 0.5 - 2]. Thus, the N,N'-diisobutyl-1,2-ethanediamine salt of Cefonicid (I) was prepd via a reaction of 7β-aminocephem II with O-formyl-D-mandeloyl chloride, adjustment of the reaction mixture to pH 5±1, and finally, addition of the diacetate salt of Me2CHCH2NH(CH2)2NHCH2CHMe2.

IT **873441-12-4P 873441-13-5P 873441-14-6P 873441-16-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(claimed compound; preparation of intermediate salts for the preparation of cephalosporin antibiotics, such as Cefdinir)

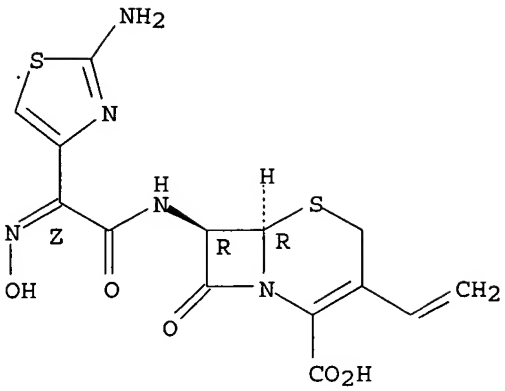
RN 873441-12-4 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with N,N'-bis(2-methylpropyl)-1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 48060-19-1
CMF C10 H24 N2

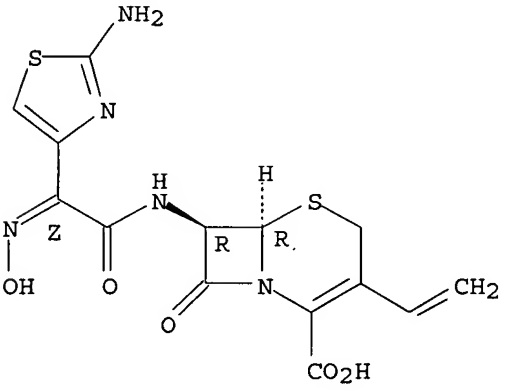
i-BuNH—CH_2—CH_2—NHBu-i

RN 873441-13-5 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with N,N'-bis(4-methoxyphenyl)-1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.

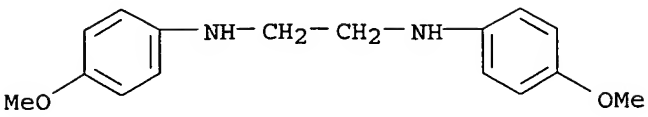


CM 2

CRN 24413-66-9

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

CMF C16 H20 N2 O2

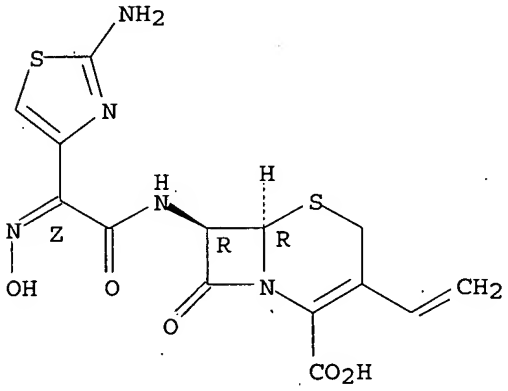


RN 873441-14-6 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with N,N'-dicyclopentyl-1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

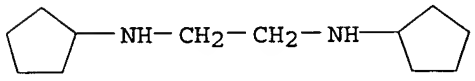
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 4013-97-2
CMF C12 H24 N2



RN 873441-16-8 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with N,N'-bis(4-methylphenyl)-1,2-ethanediamine (9CI) (CA INDEX NAME)

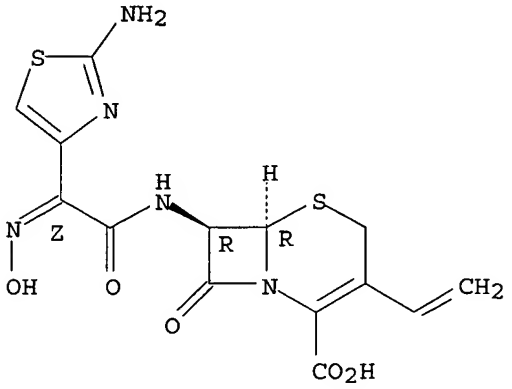
CM 1

CRN 91832-40-5

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

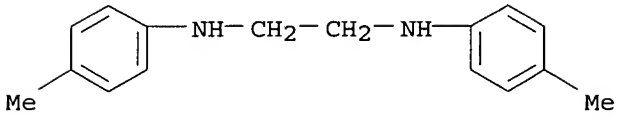
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 4693-68-9
CMF C16 H20 N2

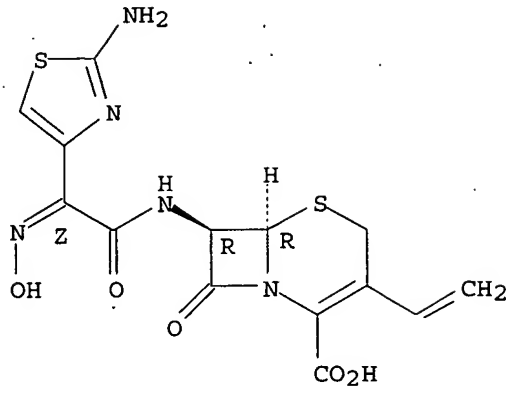


IT **865410-88-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of intermediate salts for the preparation of cephalosporin antibiotics, such as Cefdinir)
RN 865410-88-4 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with N,N'-dicyclohexyl-1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

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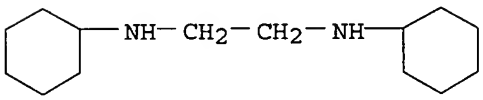
CMF C14 H28 N2



L7 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1154562 CAPLUS
DOCUMENT NUMBER: 143:427351
TITLE: Preparation of stable amorphous cefdinir
INVENTOR(S): Server, Nancy E.; Law, Devalina
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005100368	A2	20051027	WO 2005-US12439	20050411

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-821695 A 20040409

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

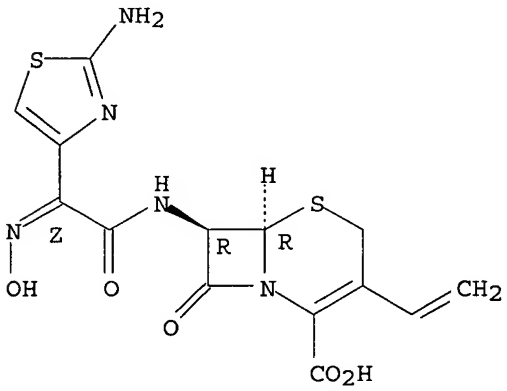
AB The present invention relates to stable amorphous cefdinir (syn isomer), methods for its preparation, and pharmaceutical compns. comprising the stable amorphous form. Amorphous cefdinir was characterized with Eudragit EPO.

IT **213978-34-8P**, Cefdinir monohydrate
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of stable amorphous cefdinir)

RN 213978-34-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monohydrate, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

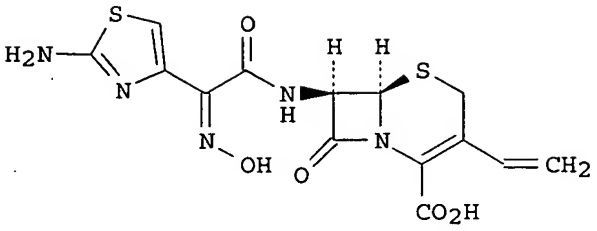


● H_2O

L7 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1050932 CAPLUS
DOCUMENT NUMBER: 143:332490
TITLE: Novel polymorph of cefdinir
INVENTOR(S): Chandrasekaran, Ramasubbu; Senthilkumar, Krishnan; Murugan, Saravan; Sangaraju, Venkatasubba Raju Sivaiah; Reddy, Gaddam Om
PATENT ASSIGNEE(S): Orchid Chemicals & Pharmaceuticals Ltd., India
SOURCE: U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005215781	A1	20050929	US 2005-79180		20050315
PRIORITY APPLN. INFO.:			US 2004-553552P	P	20040317

GI



I

AB The present invention relates to novel polymorph (crystal form D) of cefdinir (I). Crystal form D of I was prepared from the N,N'-dicyclohexylethane-1,2-diamine salt of I.

IT **865411-26-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(novel polymorph of cefdinir)

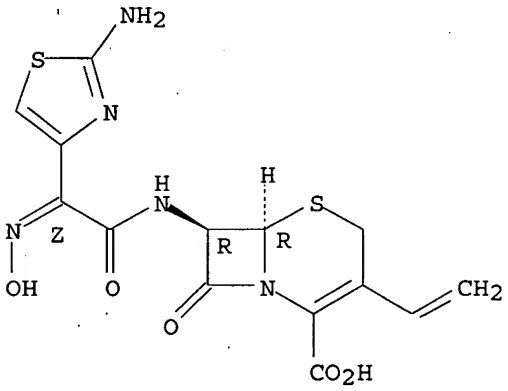
RN 865411-26-3 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with N,N'-dicyclohexyl-1,2-ethanediamine (1:1) (9CI) (CA INDEX NAME)

CM 1

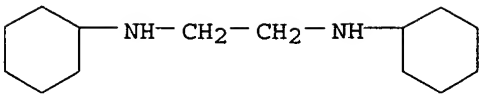
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 4013-98-3
CMF C14 H28 N2



L7 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1042254 CAPLUS
DOCUMENT NUMBER: 143:332671
TITLE: Novel polymorph of cefdinir with improved stability
INVENTOR(S): Chandrasekaran, Ramasubbu; Senthilkumar, Krishnan; Murugan, Saravanan; Sangaraju, Venkatasubba Raju Sivaiah; Reddy, Gaddam Om
PATENT ASSIGNEE(S): Orchid Chemicals & Pharmaceuticals Limited, India
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005090360	A1	20050929	WO 2005-IB652	20050315

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: IN 2004-CH247 A 20040319

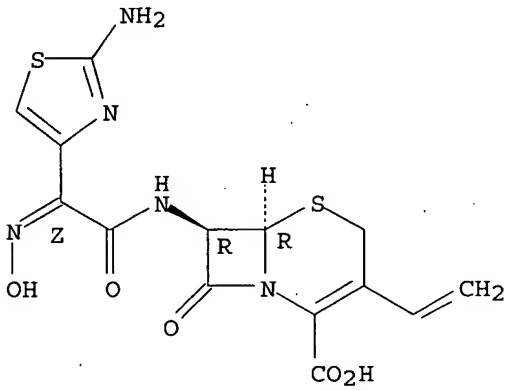
AB A method is presented for preparation of a novel polymorph of cefdinir, i.e., the crystalline Form D, by adjusting the pH of a solution of cefdinir salt in mixture of water and organic solvent to 2.5 to 2.7 at low temperature to get cefdinir with new crystal lattice which has better stability. For example, N,N'-dicyclohexylethane-1,2-diamine salt of cefdinir (cefdinir DDA salt) was prepared by adding to 7-amino-3-vinyl-3-cephem-4-carboxylic acid (100 g) in a mixture of THF and water triethylamine (90.0 g) at 20°, followed by 2-mercaptobenzothiazolyl (Z)-(2-aminothiazol-4-yl)-2-(trityloxyimino)acetate (260 g) at 32°, and addition of a solution of N,N'-dicyclohexylethane-1,2-diamine (80 g) in isopropanol to yield 220 g of cefdinir DDA salt (purity 98.27%, water content 1.0%). Cefdinir DDA salt (125 g) was stirred in a mixture of water (3750 mL) and acetone (250 mL) at 35 to 38° and aqueous HCl acid was added to adjust pH to 1.2 to 1.8. After stirring for 5 to 10 min, pH was adjusted to 6.0 using ammonia solution (100 mL). Then carbon was added and stirred at 35 to 38° for 30 min. The filtrate was cooled to 15° and pH was adjusted to 1.5 using aqueous HCl acid to get a clear solution Then pH was readjusted to 2.5 using ammonia solution at 10 to 15°. The white slurry was stirred for 3 h, the precipitate was filtered, washed with water and air dried to get 66.5 g of cefdinir Form D (purity 98 to 99%, water content 15.07%).

IT **865410-88-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of cefdinir polymorph with improved stability)
RN 865410-88-4 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with N,N'-dicyclohexyl-1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

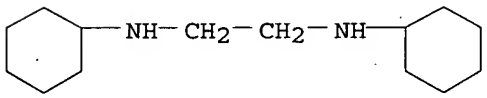
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 4013-98-3
CMF C14 H28 N2



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1026603 CAPLUS
DOCUMENT NUMBER: 143:299076
TITLE: Trihemihydrate, anhydrate and novel hydrate forms of cefdinir
INVENTOR(S): Law, Devalina; Henry, Rodger F.; Lou, Xiaochun
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005209211	A1	20050922	US 2005-72568	20050303
WO 2005090361	A1	20050929	WO 2005-US7359	20050307
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2006025399	A1	20060202	US 2005-177202	20050708
PRIORITY APPLN. INFO.:			US 2004-553643P	P 20040316
			US 2005-72568	A2 20050303

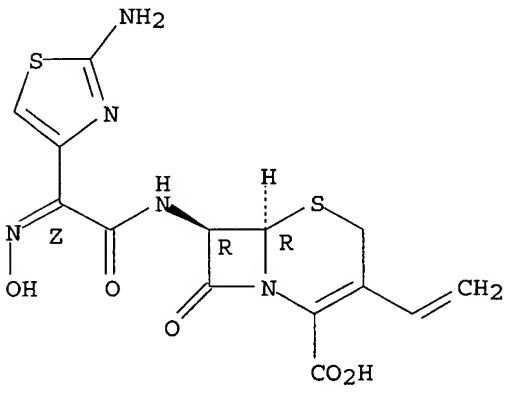
AB The present invention relates to trihemihydrate, novel lower hydrate and anhydrate forms of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer), methods for their preparation, and pharmaceutical compns. comprising these forms.

IT **864876-37-9**
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(trihemihydrate, anhydrate and novel hydrate forms of cefdinir)

RN 864876-37-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, hydrate (2:7), (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



●7/2 H_2O

L7 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

ACCESSION NUMBER: 2005:626961 CAPLUS
DOCUMENT NUMBER: 143:115388
TITLE: Process for the preparation of cefdinir Na
INVENTOR(S): Wang, Dengzhi; Hou, Peng
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1415615	A	20030507	CN 2002-146335	20021024
PRIORITY APPLN. INFO.:			CN 2002-146335	20021024

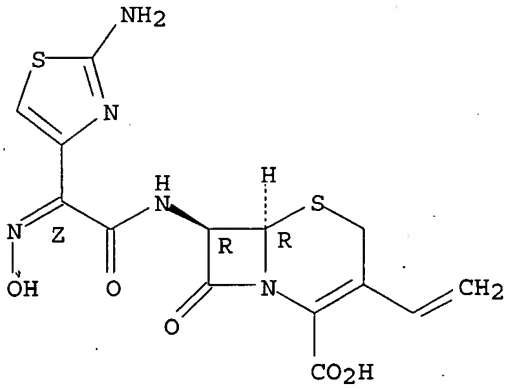
OTHER SOURCE(S): CASREACT 143:115388

AB Cefdinir Na is prepared by reaction of cefdinir with NaHCO3 at a molar ratio of 1:1, precipitation with ethanol, and vacuum drying at low temperature

IT **91832-39-2P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of cefdinir Na by reaction of cefdinir with NaHCO3)

RN 91832-39-2 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monosodium salt, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



● Na

L7 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:547252 CAPLUS
DOCUMENT NUMBER: 143:65485
TITLE: Cefdinir crystal B as novel crystalline form and method for preparation
INVENTOR(S): Dandala, Ramesh; Sivakumaran, Meenakshisunderam
PATENT ASSIGNEE(S): India
SOURCE: U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of U.S.

Ser. No. 634,978.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005137182	A1	20050623	US 2004-976230	20041029
US 2004242556	A1	20041202	US 2004-634978	20040224
PRIORITY APPLN. INFO.:			IN 2003-MA440 A	20030602
			US 2004-634978 A2	20040224

AB The present invention relates to novel crystalline form of Cefdinir, 7β-[(Z)-2-(2-amino-4-thiazolyl)-2-hydroxyiminoacetamido]-3-vinyl-3-cephem-4-carboxylic acid, herein referred as cefdinir crystal B, processes for preparing cefdinir crystal B, and the incorporation of cefdinir crystal B in pharmaceutical compns. A process for preparing crystalline cefdinir crystal B
comprises the steps of: reacting crystals A of cefdinir in water with trifluoroacetic acid at about 35-40°C to form cefdinir trifluoroacetic acid salt; optionally isolating the cefdinir trifluoroacetic acid salt; neutralizing the cefdinir trifluoroacetic acid salt by treatment with a base in water at a temperature between about 0- to 30°C; and isolating cefdinir crystal B by filtration.

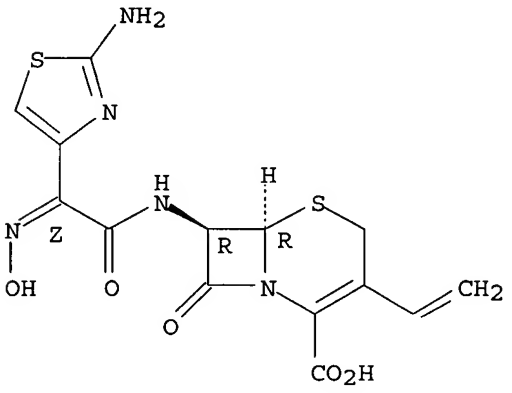
IT **799796-73-9P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(cefdinir crystal B as novel crystalline form and method for preparation)

RN 799796-73-9 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

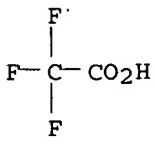
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



L7 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:450931 CAPLUS
DOCUMENT NUMBER: 142:487516
TITLE: Cefdinir pyridine salt
INVENTOR(S): Duerst, Richard W.; Law, Devalina; Lou, Xiaochun
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005113355	A1	20050526	US 2004-939908		20040913
PRIORITY APPLN. INFO.:			US 2003-502441P	P	20030912

AB The present invention relates to a novel pyridine salt of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer), methods for its preparation, and pharmaceutical compns. comprising the salt.

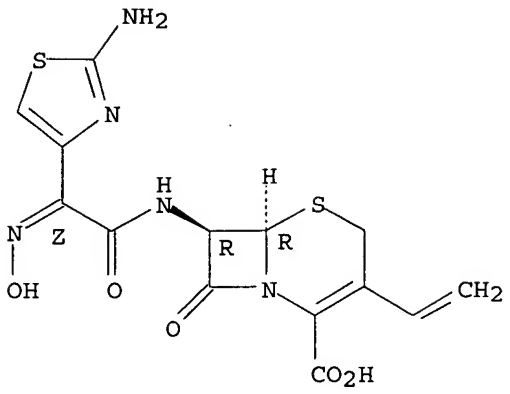
IT **799835-04-4P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Cefdinir pyridine salt)

RN 799835-04-4 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

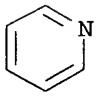
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 110-86-1
CMF C5 H5 N



L7 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:238740 CAPLUS
DOCUMENT NUMBER: 142:298138
TITLE: A preparation of cefdinir pyridine salt, useful for the treatment of bacterial infections
INVENTOR(S): Duerst, Richard W.; Law, Devalina; Lou, Xiaochun
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 10 pp., Cont.-in-part of U.S. Ser. No. 661,148.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005059819	A1	20050317	US 2004-778851	20040213
US 2005059818	A1	20050317	US 2003-661148	20030912

PRIORITY APPLN. INFO.: US 2003-661148 A2 20030912

AB The invention relates to a preparation of novel pyridine salt of 7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamide]-3-vinyl-3-cephem-4-carboxylic acid (cefdinir), useful for the treatment of bacterial infections (no biol. data). The solubility of cefdinir in pyridine was estimated
A suspension of cefdinir in pyridine was allowed to stand at room temperature After 1 wk, the solid from the suspension was separated and the powder X-ray diffraction pattern, 1H NMR, TGA, and IR spectrum of the moist solid were generated.

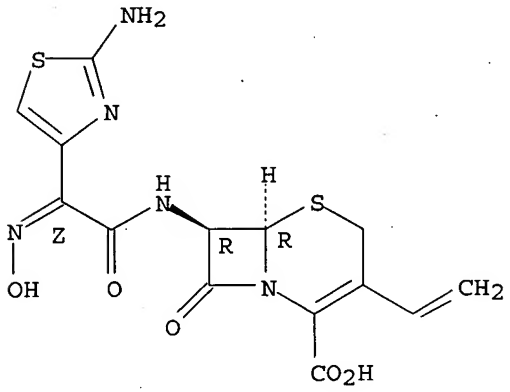
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

IT **799835-04-4P**
RL: IMF (Industrial manufacture); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of cefdinir pyridine salt useful for the treatment of bacterial infections)
RN 799835-04-4 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

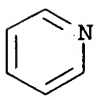
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 110-86-1
CMF C5 H5 N



L7 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:1037109 CAPLUS
DOCUMENT NUMBER: 142:28168
TITLE: Crystalline form of cefdinir
INVENTOR(S): Kumar, Yatendra; Prasad, Mohan; Prasad, Ashok
PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004104010	A1	20041202	WO 2004-IB1629	20040520

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: IN 2003-DE711 A 20030520

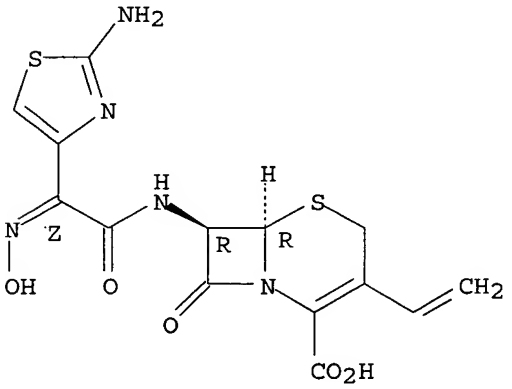
AB The invention relates to a new crystalline form of cefdinir. More particularly, it relates to the preparation of new crystalline form of cefdinir, referred to as 'Form R' and pharmaceutical compns. that include the 'Form R'. It also relates to a method of treatment of infectious diseases comprising administration of the 'Form R'. The Form R was obtained from crystalline cefdinir K salt.

IT **213978-34-8**, Cefdinir monohydrate
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(crystalline form of cefdinir)

RN 213978-34-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monohydrate, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



● H_2O

IT **91832-41-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(crystalline form of cefdinir)

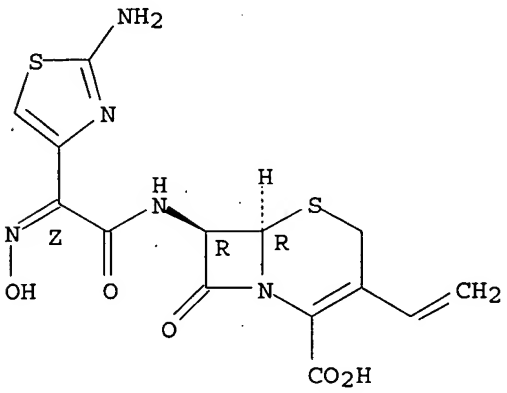
RN 91832-41-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monopotassium salt, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



● K

IT **213978-33-7 799835-03-3 799835-04-4**
799835-05-5 799835-06-6 799835-08-8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(crystalline form of cefdinir)

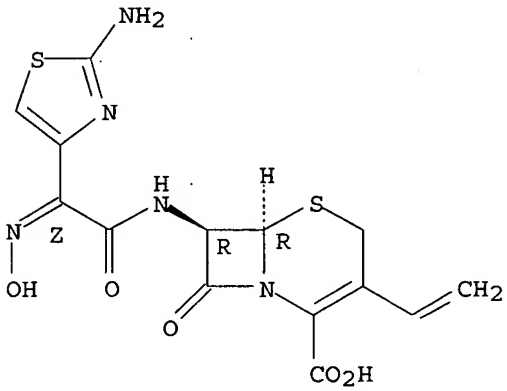
RN 213978-33-7 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with N-cyclohexylcyclohexanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

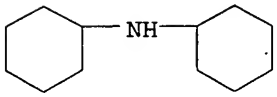
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 101-83-7
CMF C12 H23 N

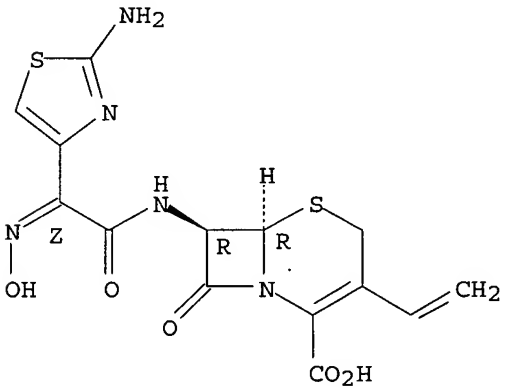


RN 799835-03-3 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

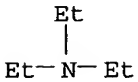
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 121-44-8
CMF C6 H15 N

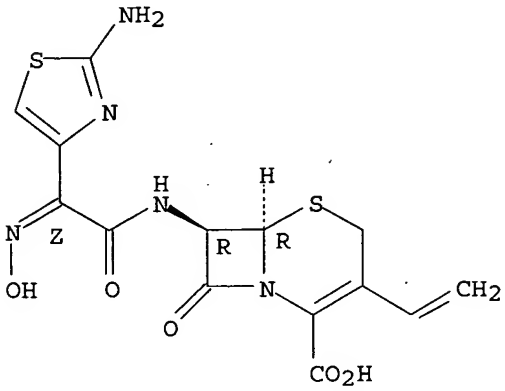


RN 799835-04-4 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

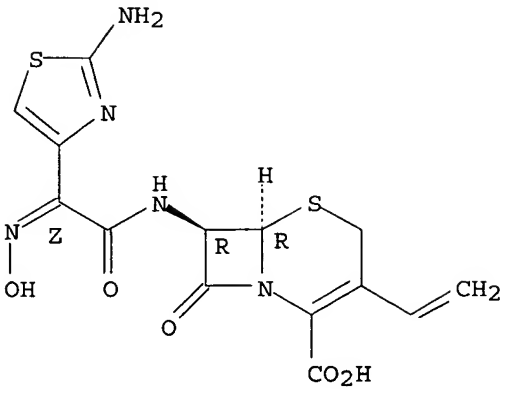
CRN 110-86-1
CMF C5 H5 N

RN 799835-05-5 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with methylpyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

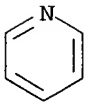
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 1333-41-1
CMF C6 H7 N
CCI IDS



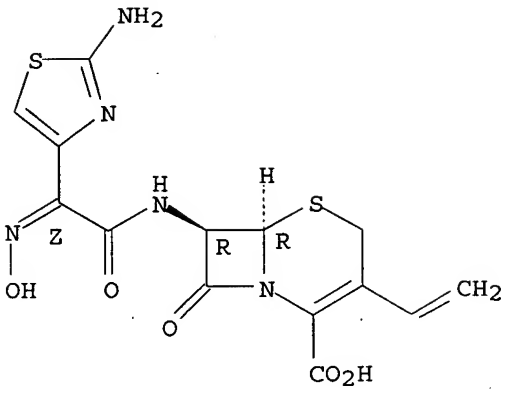
D1— Me

RN 799835-06-6 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with 2-aminoethanol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 141-43-5
CMF C2 H7 N O

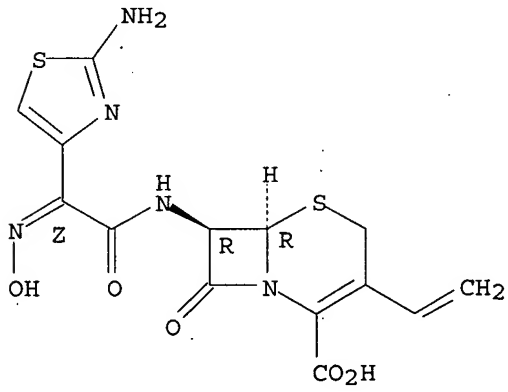
$H_2N-CH_2-CH_2-OH$

RN 799835-08-8 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with 2,2',2''-nitrilotris[ethanol] (1:1) (9CI) (CA INDEX NAME)

CM 1

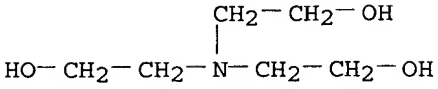
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 102-71-6
CMF C6 H15 N O3



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:1036706 CAPLUS
DOCUMENT NUMBER: 142:28157
TITLE: Novel crystalline form of cefdinir
INVENTOR(S): Dandala, Ramesh; Sivakumaran, Meenakshisunderam
PATENT ASSIGNEE(S): India
SOURCE: U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004242556	A1	20041202	US 2004-634978	20040224
US 2005137182	A1	20050623	US 2004-976230	20041029
PRIORITY APPLN. INFO.:			IN 2003-MA440 A	20030602
			US 2004-634978 A2	20040224

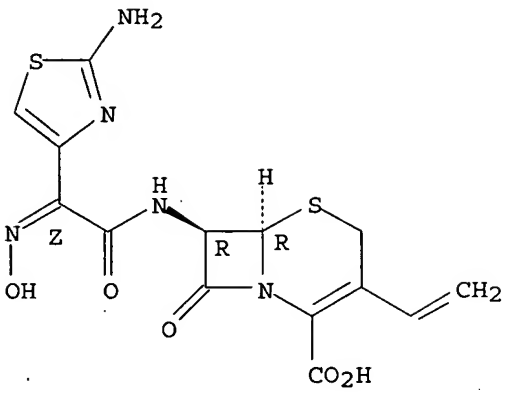
AB The present invention relates to novel crystalline form of cefdinir (cefdinir Crystal B; water content of 5.5 to 7.0% by weight), process to prepare it and the use of cefdinir Crystal B in pharmaceutical compns. A process for preparing crystalline cefdinir Crystal B comprises the steps of (i) reacting cefdinir Crystal A in water with trifluoroacetic acid at 35 to 40° to form cefdinir trifluoroacetic acid salt (CTFA salt), (ii) optionally isolating the CTFA salt, and (iii) neutralizing the CTFA salt by treatment with a base in water at a temperature between 0° and 30°, isolating cefdinir Crystal B by filtration. A pharmaceutical composition comprises a therapeutically effective amount of cefdinir Crystal B and a pharmaceutically acceptable carrier.

IT **799796-73-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of cefdinir crystalline form B for dosage forms)
RN 799796-73-9 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

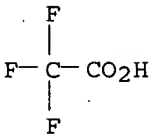
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



L7 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:817895 CAPLUS
DOCUMENT NUMBER: 141:320013
TITLE: Novel crystal of 7-[2-(2-aminothiazole-4-yl)-2-hydroxyiminoacetamido]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) and method for preparation thereof
INVENTOR(S): Imai, Eiji; Niwa, Hiroyuki
PATENT ASSIGNEE(S): Shiono Chemical Co. Ltd., Japan
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004085443	A1	20041007	WO 2004-JP3622	20040318

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,

TD, TG

CA 2520083	AA	20041007	CA 2004-2520083	20040318
EP 1609793	A1	20051228	EP 2004-721656	20040318

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

PRIORITY APPLN. INFO.: JP 2003-81273 A 20030324
WO 2004-JP3622 W 20040318

OTHER SOURCE(S): CASREACT 141:320013

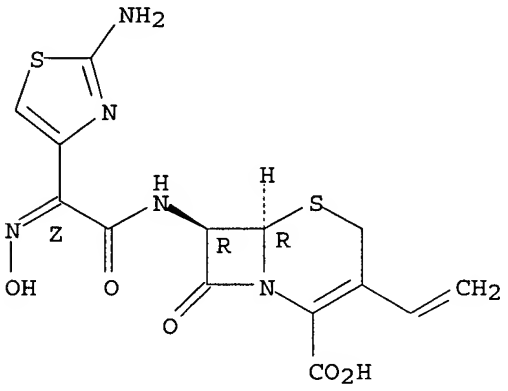
AB Disclosed is a novel crystal (B-type crystal) of 7-[2-(2-aminothiazole-4-yl)-2-hydroxyiminoacetamido]-3-vinyl-3-cephem-4-carboxylic acid (a syn isomer), characterized in that it exhibits peaks at diffraction angles shown in the following Table 1, in its powder X ray diffraction pattern; Table 1 Diffraction Angle 2θ (°) approx. 11.7 approx. 16.1 approx. 18.6 approx. 21.2 approx. 22.3 approx. 24.4 approx. 26.2 and a method for preparing the novel crystal which comprises forming a crystal from a solution at a temperature of -5 to 5°C in an acidic state. The crystal is not bulky, exhibits good stability and good filterability, and is excellent in the solubility toward water, and thus can be prepared with ease.

IT **122224-48-0P**
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(novel crystal of 7-[2-(2-aminothiazole-4-yl)-2-hydroxyiminoacetamido]-3-vinyl-3-cephem-4-carboxylic acid (syn isomer) and method for preparation thereof)

RN 122224-48-0 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, hydrochloride, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



●x HCl

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:546513 CAPLUS
DOCUMENT NUMBER: 141:88964
TITLE: Process for preparing crystalline cefdinir salts

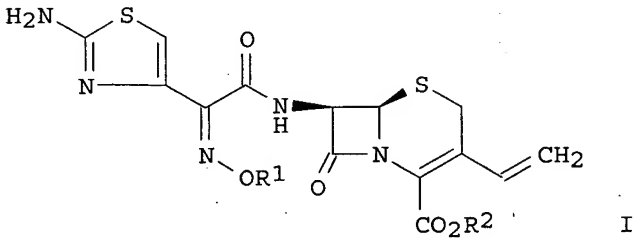
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

INVENTOR(S): Pozzi, Giovanni; Martin Gomez, Patricio; Alpegiani, Marco; Cabri, Walter
PATENT ASSIGNEE(S): Antibioticos S.p.A., Italy
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004056835	A1	20040708	WO 2003-EP13524	20031201
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1572699	A1	20050914	EP 2003-789109	20031201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

PRIORITY APPLN. INFO.: IT 2002-MI2724 A 20021220
WO 2003-EP13524 W 20031201

OTHER SOURCE(S): MARPAT 141:88964
GI



I

AB Cefdinir salts, such as I.nH3PO4 [R1, R2 = H; n = 1 - 3 (II)], the hydrates and solvates thereof, were prepared from cefdinir intermediates, I (R1 = benzhydryl, trityl, p-methoxybenzyl; R2 = benzhydryl, tert-Bu, p-methoxybenzyl), or crude cefdinir I (R1, R2 = H) by the treatment with phosphoric acid. Thus, I (R1 = CPh3, R2 = H) was dissolved in 85% phosphoric acid and acetonitrile, and reaction mixture was heated at 45°C for 2 h, to afford cefdinir phosphate. The use of II for the preparation and purification of cefdinir is also disclosed.

IT **717131-50-5P**, Cefdinir phosphate
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and use of cefdinir phosphates for preparing and purification of cefdinir)

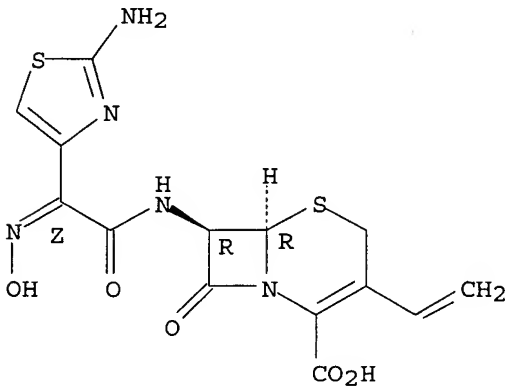
RN 717131-50-5 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,

7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, phosphate (salt) (9CI) (CA INDEX NAME)

CM 1

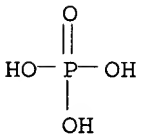
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 7664-38-2
CMF H3 O4 P



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:453223 CAPLUS
DOCUMENT NUMBER: 141:6966
TITLE: Process for preparing cefdinir and its amorphous hydrate
INVENTOR(S): Deshpande, Pandurang Balwant; Khadangale, Bhausaheb Pandharinath; Ramasubbu, Chandrasekaran
PATENT ASSIGNEE(S): Orchid Chemicals & Pharmaceuticals Ltd., India
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2004046154	A1	20040603	WO 2003-IB5032	20031110

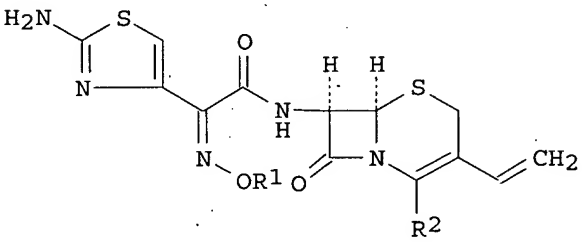
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

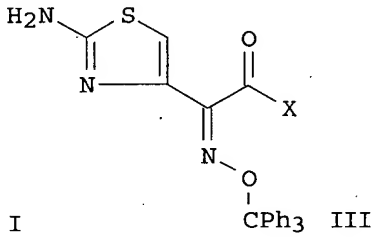
PRIORITY APPLN. INFO.: IN 2002-MA848 A 20021115
IN 2003-MA152 A 20030226

OTHER SOURCE(S): CASREACT 141:6966; MARPAT 141:6966

GI



I



III

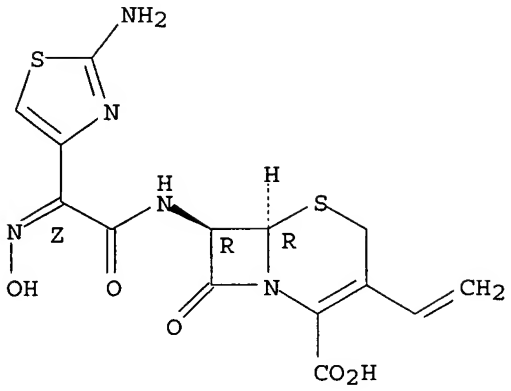
AB The present invention discloses a process for preparing cefdinir [I; R1 = H; R2 = CO2H (II)] and its monohydrate via condensing 7-amino-3-cephem-4-carboxylic acid with III (X = ester, thioester, halo, etc.) in the presence of a tertiary amine and an organic solvent, followed by treatment with a base to produce I [R1 = C(Ph)3; R2 = carboxylate ion (IV)], and hydrolyzing IV, using an acid in the presence of a solvent, to produce II. Thus, reaction between III (X = OH) and 2-mercapto-5-phenyl-1,3,4-oxadiazole yielded 2-mercapto-5-phenyl-1,3,4-oxadiazolyl-(Z)-(2-aminothiazol-4-yl)-2-(trityloxyimino) acetate, which, on condensation with 7-amino-3-vinyl-3-cephem-4-carboxylic acid and subsequent hydrolysis, afforded II.

IT **213978-34-8P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of cefdinir and its amorphous hydrate)

RN 213978-34-8 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monohydrate, (6R,7R)- (9CI) (CA INDEX NAME)

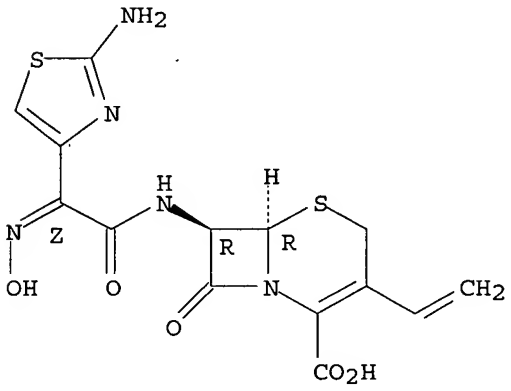
Absolute stereochemistry.
Double bond geometry as shown.



● H_2O

IT **696592-20-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of cefdinir and its amorphous hydrate)
RN 696592-20-8 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monoammonium salt, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



● NH_3

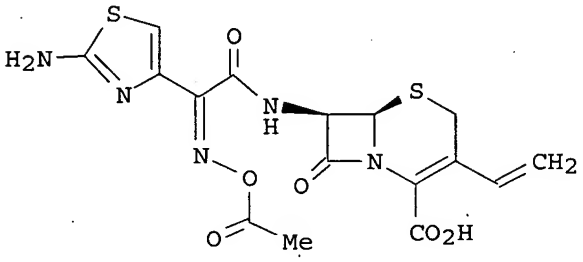
L7 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:162698 CAPLUS
DOCUMENT NUMBER: 140:217437
TITLE: Process for the preparation of cefdinir intermediate
INVENTOR(S): Kremminger, Peter; Wolf, Siegfried; Ludescher, Johannes
PATENT ASSIGNEE(S): Sandoz G.m.b.H., Austria

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004016623	A1	20040226	WO 2003-EP8944	20030812
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SY, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
AU 2003255424	A1	20040303	AU 2003-255424	20030812
EP 1554289	A1	20050720	EP 2003-787771	20030812
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006500356	T2	20060105	JP 2004-528469	20030812
US 2006025586	A1	20060202	US 2005-524397	20050211
PRIORITY APPLN. INFO.:			AT 2002-1223 A	20020813
			AT 2002-1588 A	20021018
			WO 2003-EP8944 W	20030812

OTHER SOURCE(S): MARPAT 140:217437
GI



I

AB A process is claimed for the synthesis of 7-[2-(2-aminothiazol-4-yl)-2-(methylcarbonyloxyimino)acetamido]-3-vinyl-cephem-4-carboxylic acid (I), in the form of a crystalline salt, such as I.HX [X = Cl-, HSO4-,RYO3-, H2NSO3-, 1/2(SO4)2-; R = alkyl, aryl; Y = S, P], and their use in the preparation of pure cefdinir. Thus, a reactive derivative of syn-2-(2-aminothiazol-4-yl)2-(methylcarbonyloxyimino)-acetic acid, e.g., syn-2-(2-aminothiazol-4-yl)2-(methylcarbonyloxyimino)-acetic acid mercapto-benzothiazolyl ester is reacted with 7-amino-3-vinyl-3-cephem-4-carboxylic acid in silylated form to obtain I, in which the carboxylic acid is optionally silylated. In another aspect, the present invention relates to salt of I, optionally in crystalline form, wherein the salt is selected from the group consisting of phosphate, hydrogen phosphate, mesylate, tosylate, sulfate, hydrogen sulfate and sulfamate.

IT **477738-51-5P**
RL: IMF (Industrial manufacture); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

(preparation and X-ray diffraction measurements of intermediates in the production of cefdinir)

RN 477738-51-5 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, mono(4-methylbenzenesulfonate) (salt) (9CI) (CA INDEX NAME)

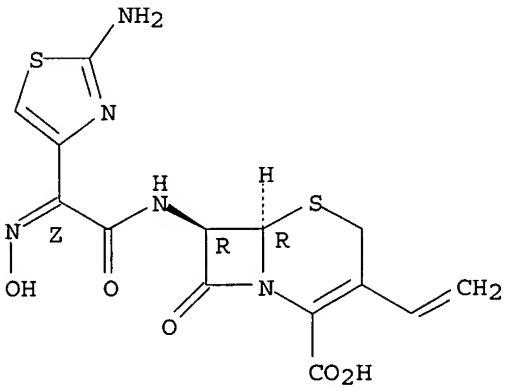
CM 1

CRN 91832-40-5

CMF C14 H13 N5 O5 S2

Absolute stereochemistry.

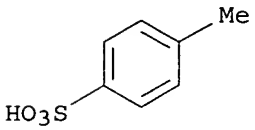
Double bond geometry as shown.



CM 2

CRN 104-15-4

CMF C7 H8 O3 S



IT **477738-57-1P**

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(process and intermediates in the production of cefdinir)

RN 477738-57-1 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

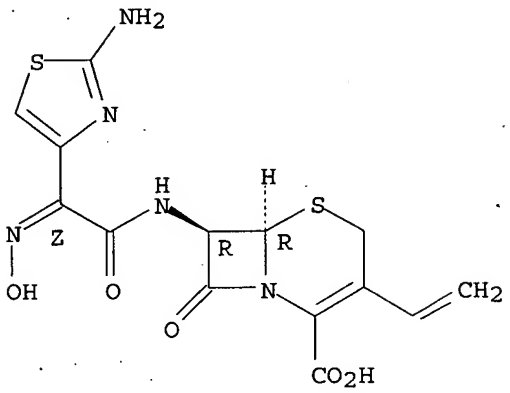
CRN 91832-40-5

CMF C14 H13 N5 O5 S2

Absolute stereochemistry.

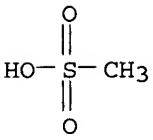
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

Double bond geometry as shown.



CM 2

CRN 75-75-2
CMF C H4 O3 S



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:472518 CAPLUS
DOCUMENT NUMBER: 139:41841
TITLE: Preparation of crystalline cefdinir potassium dihydrate
INVENTOR(S): Kumar, Yatendra; Prasad, Mohan; Prasad, Ashok; Singh, Shailendra Kumar; Kumar, Neela Praveen
PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India
SOURCE: PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003050124	A1	20030619	WO 2002-IB5315	20021212

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2003091261 A1 20031106 WO 2002-IB1410 20020426
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002307805 A1 20031110 AU 2002-307805 20020426
BR 2002015709 A 20050329 BR 2002-15709 20020426
EP 1546154 A1 20050629 EP 2002-807297 20020426
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2005530741 T2 20051013 JP 2003-587819 20020426
AU 2002347539 A1 20030623 AU 2002-347539 20021212
EP 1458728 A1 20040922 EP 2002-783470 20021212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
US 2005080255 A1 20050414 US 2003-498406 20021212
JP 2005516011 T2 20050602 JP 2003-551148 20021212
US 2006040915 A1 20060223 US 2005-513004 20050714

PRIORITY APPLN. INFO.:
IN 2001-DE1242 A 20011213
WO 2002-IB1410 A 20020426
WO 2002-IB5315 W 20021212

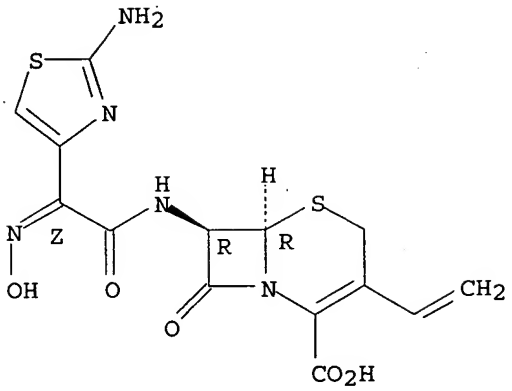
AB The present invention relates to a novel crystalline cefdinir potassium dihydrate (I), to a process for its preparation and to a method of preparing pure
cefdinir via the crystalline salt. Thus, cefdinir was suspended in water and acetone and potassium acetate was added to the suspension to form the I.

IT **543673-30-9P**
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Crystalline cefdinir potassium dihydrate)

RN 543673-30-9 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monopotassium salt, dihydrate, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

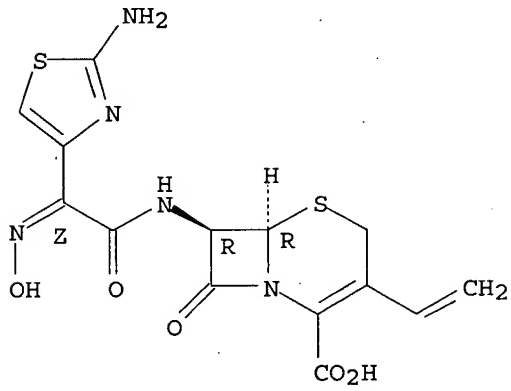


● 2 H_2O

● K

IT **91832-41-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(crystalline cefdinir potassium dihydrate)
RN 91832-41-6 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-
, monopotassium salt, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



● K

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:946292 CAPLUS
DOCUMENT NUMBER: 138:13981
TITLE: Process for the preparation of high purity cefdinir via formations of crystalline acid salts

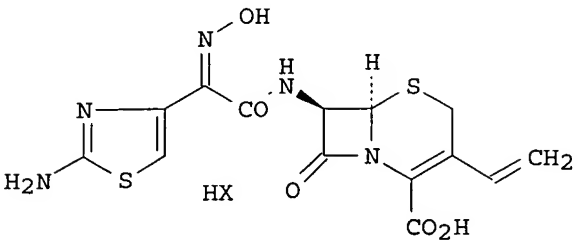
Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

INVENTOR(S): Lee, Gwan Sun; Chang, Young Kil; Kim, Hong Sun; Park, Chul Huyn; Park, Gha Seung; Kim, Cheol Kyung
PATENT ASSIGNEE(S): Hanmi Pharm. Co., Ltd., S. Korea
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002098884	A1	20021212	WO 2002-KR1064	20020605
W: CN, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
KR 2002092612	A	20021212	KR 2001-31339	20010605
EP 1392703	A1	20040303	EP 2002-730990	20020605
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
CN 1512996	A	20040714	CN 2002-811334	20020605
JP 2004534053	T2	20041111	JP 2003-502005	20020605
US 2004210049	A1	20041021	US 2003-479291	20031125

PRIORITY APPLN. INFO.: KR 2001-31339 A 20010605
WO 2002-KR1064 W 20020605

GI



I

AB High purity cefdinir is prepared in a high yield by a process comprising the steps of: treating a cefdinir intermediate with a formic acid-sulfuric acid mixture or a formic acid-methanesulfonic acid mixture to obtain a crystalline salt of cefdinir I [HX = H2SO4, MeSO3H] and reacting the crystalline salt with a base in a solvent. Thus, crystalline cefdinir.TsOH.2DMAC was prepared by an amidation reaction of (Z)-2-amino-α-[(triphenylmethoxy)imino]-4-thiazoleethanethioic acid S-2-benzothiazolyl ester with 7-amino-3-vinyl-3-cephem-4-carboxylic acid using Bu3N in N,N-dimethylacetamide (DMAC), followed by treatment with TsOH. Crystalline cefdinir.TsOH.2DMAC was converted to crystalline cefdinir.H2SO4 in 91% yield using 90% HCO2H, 98% H2SO4 and MeCN. 99.9% Pure cefdinir was then obtained by suspending crystalline cefdinir.H2SO4 in H2O and adjusting the pH to 3.4 to 3.6 using Na2CO3. Also, 99.8% pure cefdinir was prepared via a similar sequence in which the intermediate salt was cefdinir.MeSO3H.

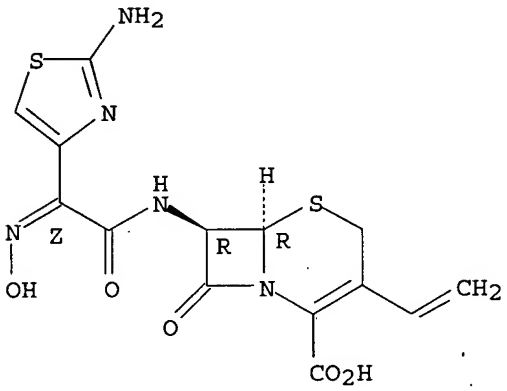
IT **477738-51-5P 477738-52-6P 477738-55-9P 477738-57-1P**
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(process for the preparation of high purity cefdinir via formations of

crystalline acid salts)
RN 477738-51-5 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-
, (6R,7R)-, mono(4-methylbenzenesulfonate) (salt) (9CI) (CA INDEX NAME)

CM 1

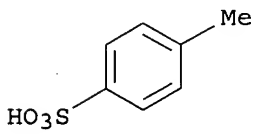
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

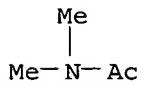
CRN 104-15-4
CMF C7 H8 O3 S



RN 477738-52-6 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-
, (6R,7R)-, mono(4-methylbenzenesulfonate) (salt), compd. with
N,N-dimethylacetamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 127-19-5
CMF C4 H9 N O



Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

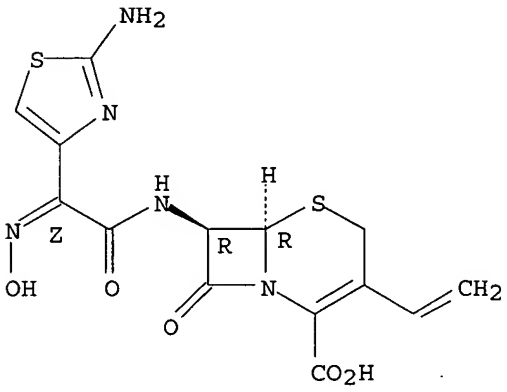
CM 2

CRN 477738-51-5
CMF C14 H13 N5 O5 S2 . C7 H8 O3 S

CM 3

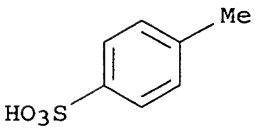
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 4

CRN 104-15-4
CMF C7 H8 O3 S

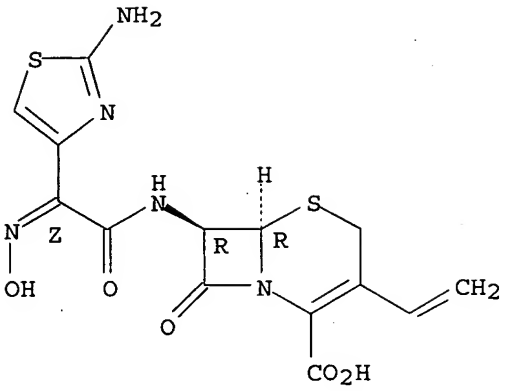


RN 477738-55-9 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, sulfate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

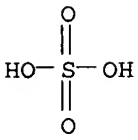
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 7664-93-9
CMF H2 O4 S

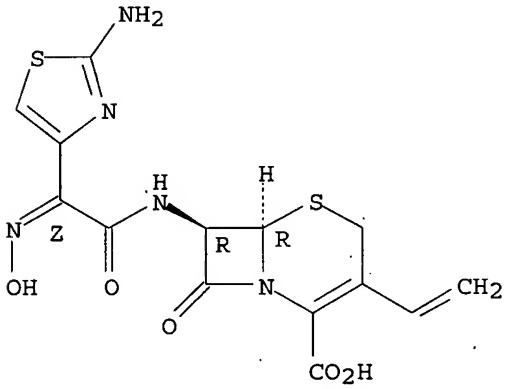


RN 477738-57-1 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

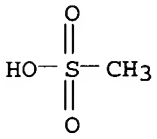
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

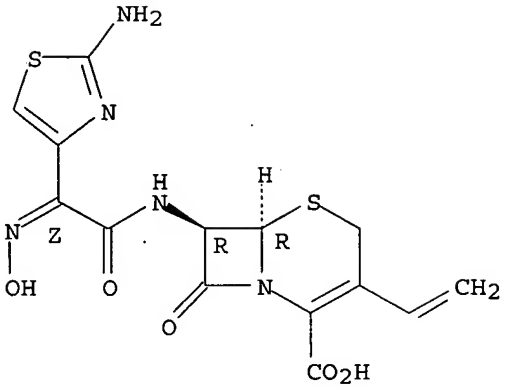
CRN 75-75-2
CMF C H4 O3 S



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:880903 CAPLUS
DOCUMENT NUMBER: 137:125013
TITLE: Synthesis of cefdinir
AUTHOR(S): Lin, Gui-chun; Liu, Li; Ma, Ling-tai; Min, Ji-mei; Zhang, Li-he
CORPORATE SOURCE: Natl. Res. Lab. Natural Biomimetic Drugs, Peking Univ., Beijing, 100083, Peop. Rep. China
SOURCE: Hecheng Huaxue (2001), 9(5), 383-385
CODEN: HEHUE2; ISSN: 1005-1511
PUBLISHER: Hecheng Huaxue Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
OTHER SOURCE(S): CASREACT 137:125013
AB Cefdinir was synthesized via the condensation of 2-(2-aminothiazol-4-yl)-2-(Z)-(acetyinmino)acetyl chloride with 7-amino-3-vinyl-3-cephem-4-carboxylic acid. Under the optimization reaction conditions 60% total yield was achieved.
IT **443874-51-9P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of cefdinir)
RN 443874-51-9 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monohydrochloride, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



● HCl

L7 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:564833 CAPLUS
DOCUMENT NUMBER: 135:152367
TITLE: Nitrate salts of antimicrobial agents
INVENTOR(S): Del Soldato, Piero; Benedini, Francesca; Antognazza, Patrizia
PATENT ASSIGNEE(S): Nicox S.A., Fr.
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001054691	A1	20010802	WO 2001-EP430	20010116
W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
IT 1317735	B1	20030715	IT 2000-MI92	20000126
CA 2397754	AA	20010802	CA 2001-2397754	20010116
AU 2001037308	A5	20010807	AU 2001-37308	20010116
BR 2001007824	A	20021105	BR 2001-7824	20010116
EP 1253924	A1	20021106	EP 2001-909631	20010116
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003520814	T2	20030708	JP 2001-554675	20010116
US 2003105066	A1	20030605	US 2002-181424	20020724
US 6794372	B2	20040921		

PRIORITY APPLN. INFO.: IT 2000-MI92 A 20000126
WO 2001-EP430 W 20010116
OTHER SOURCE(S): MARPAT 135:152367
AB Nitrate salts of antiviral, antifungal, and antibacterial agents such as

acyclovir, tetracycline, etc. were prepared Growth inhibition of, e.g., an S. Aureus strain by title compds. was demonstrated.

IT **352465-64-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nitrate salts of antimicrobial agents)

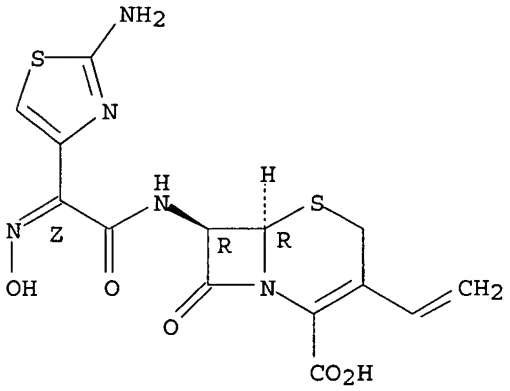
RN 352465-64-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, nitrate (salt) (9CI) (CA INDEX NAME)

CM 1

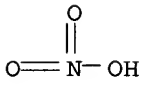
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 7697-37-2
CMF H N O3



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:682396 CAPLUS
DOCUMENT NUMBER: 129:275784
TITLE: synthesis of crystalline dicyclohexylamine salt of cefdinir
INVENTOR(S): Sturm, Hubert; Wolf, Siegfried; Ludescher, Johannes
PATENT ASSIGNEE(S): Biochemie G.m.b.H., Austria
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9845299	A1	19981015	WO 1998-EP1953	19980402
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AT 9700570	A	19981115	AT 1997-570	19970404
AT 405283	B	19990625		
CA 2283718	AA	19981015	CA 1998-2283718	19980402
AU 9874288	A1	19981030	AU 1998-74288	19980402
AU 731413	B2	20010329		
EP 973779	A1	20000126	EP 1998-921425	19980402
EP 973779	B1	20030702		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI				
TR 9902406	T2	20000221	TR 1999-9902406	19980402
BR 9809745	A	20000620	BR 1998-9745	19980402
JP 2000514833	T2	20001107	JP 1998-542358	19980402
JP 3421354	B2	20030630		
AT 244249	E	20030715	AT 1998-921425	19980402
NO 9904466	A	19990915	NO 1999-4466	19990915
US 6350869	B1	20020226	US 1999-381947	19990927
MX 9909045	A	20000228	MX 1999-9045	19991001

PRIORITY APPLN. INFO.:	AT 1997-570	A	19970404
	EP 1998-921425	A	19980402
	WO 1998-EP1953	W	19980402

AB A process for production of cefdinir in the form of a salt with dicyclohexylamine, and its use in the purification of impure cefdinir is described.

IT **213978-33-7P**, Cefdinir dicyclohexylamine salt
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of crystalline dicyclohexylamine salt of cefdinir)

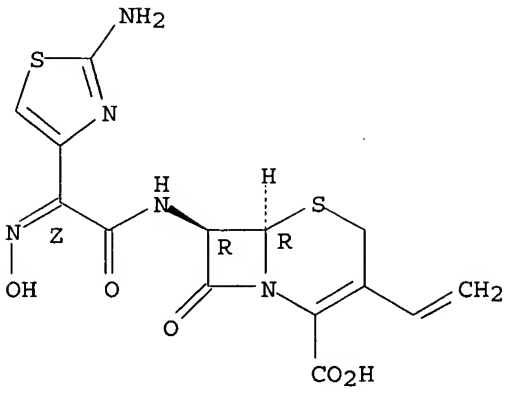
RN 213978-33-7 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, (6R,7R)-, compd. with N-cyclohexylcyclohexanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

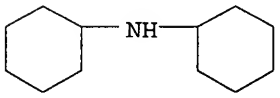
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



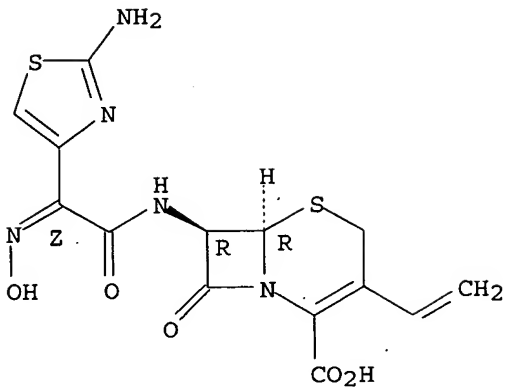
CM 2

CRN 101-83-7
CMF C12 H23 N



IT **213978-34-8P**, Cefdinir monohydrate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of crystalline dicyclohexylamine salt of cefdinir)
RN 213978-34-8 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monohydrate, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



● H_2O

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:504241 CAPLUS
DOCUMENT NUMBER: 117:104241
TITLE: Antibacterial pharmaceuticals for prevention or treatment of Enterococcus infection
INVENTOR(S): Yokota, Yoshiko; Teratani, Noriko
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04029930	A2	19920131	JP 1990-134493	19900524
PRIORITY APPLN. INFO.:			JP 1990-134493	19900524

AB Antibacterial pharmaceuticals for prevention or treatment of Enterococcus infection contain combinations of antibacterial substances or their pharmaceutically acceptable salts. The combinations are selected from (A)a combination of cefazolin and imipenem, ampicillin, or ticarcillin, (B)a combination of ticarcillin and imipenem, erythromycin, or fosfomycin, (C)a combination of amoxicillin and cefdinir or clindamycin, and (D)a combination of ampicillin and vancomycin, imipenem, erythromicin, fosfomycin, tobramycin, or chloramphenicol. The fractional inhibitory concentration index of a combination of Penbritin with Cefazolin against E. faecalis ATCC 29212 was 0.75, vs. 2 for a combination of Sawacillin with Tarivid. Cefazolin Na salt (125 mg) and 125 mg ampicillin Na salt were dissolved in 2 mL sterilized H2O to give an injection.

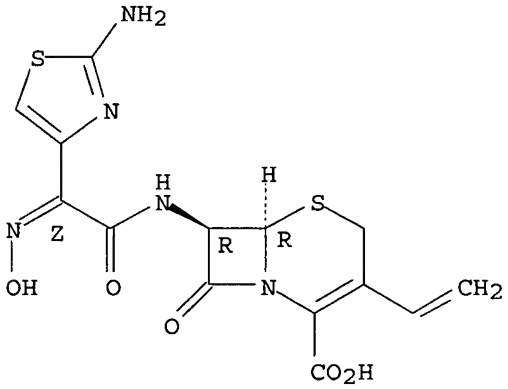
IT **143108-40-1**, Cefzon-Sawacillin mixture
RL: BIOL (Biological study)
(for treatment of Enterococcus infection, synergistic)
RN 143108-40-1 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-,

[6R-[6α,7β(Z)]]-, mixt. with [2S-[2α,5α,6β(S*)]]-6-[[amino(4-hydroxyphenyl)acetyl]amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid (9CI) (CA INDEX NAME)

CM 1

CRN 91832-40-5
CMF C14 H13 N5 O5 S2

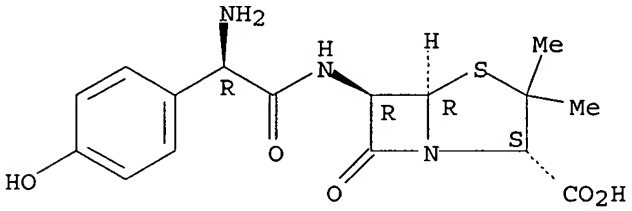
Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 26787-78-0
CMF C16 H19 N3 O5 S

Absolute stereochemistry.



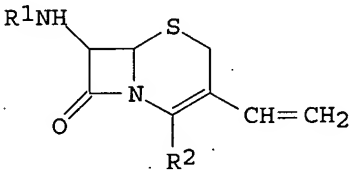
L7 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:496960 CAPLUS
DOCUMENT NUMBER: 111:96960
TITLE: Preparation of syn-7-[2-(2-aminothiazol-4-yl)-2-hydroxyiminoacetamido]-3-vinyl-3-cephem-4-carboxylic acid in a crystalline form
INVENTOR(S): Takaya, Takao; Shirai, Fumiyuki; Nakamura, Hitoshi; Inaba, Yasunobu
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 304019	A2	19890222	EP 1988-113311	19880817
EP 304019	A3	19901227		
EP 304019	B1	19950531		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
ZA 8805709	A	19890426	ZA 1988-5709	19880803
US 4935507	A	19900619	US 1988-229489	19880808
JP 01250384	A2	19891005	JP 1988-202527	19880812
JP 06074276	B4	19940921		
AU 8820998	A1	19890223	AU 1988-20998	19880816
AU 617347	B2	19911128		
ES 2072856	T3	19950801	ES 1988-113311	19880817
CA 1297096	A1	19920310	CA 1988-575044	19880818
KR 9708126	B1	19970521	KR 1988-10489	19880818
PRIORITY APPLN. INFO.:			JP 1987-206199 A	19870819

GI



II

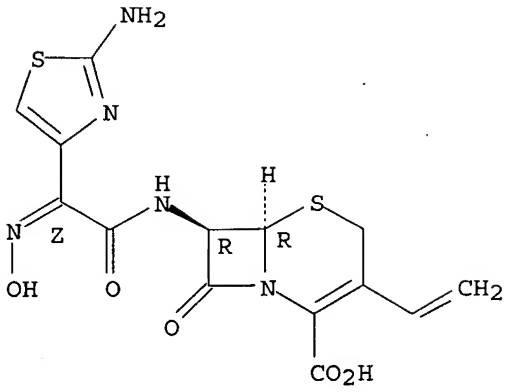
AB The title compound (I) was prepared in a crystalline form and characterized by its x-ray diffraction pattern. Cephemcarboxylate II (R1 = H, R2 = CPh2) was stirred 30 min at -10 to 0° with ClCH2COCH2COCl (preparation given) in AcNMe2 to give II (R1 = ClCH2COCH2CO, R2 = CPh2) which was stirred with NaNO2 in CH2Cl2 containing HOAc to give, after saponification, II [R1 = ClCH2COC(:NOH)CO, R2 = H]. The latter was stirred 6 h with (H2N)CS in H2O containing NaOAc maintained at pH 5.5-5.7 by addition of aqueous NH3 to give after chromatog. and acidification, crystallization I.

IT **122224-48-0P 122224-49-1P 122224-50-4P 122224-51-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as antibacterial agent)

RN 122224-48-0 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, hydrochloride, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



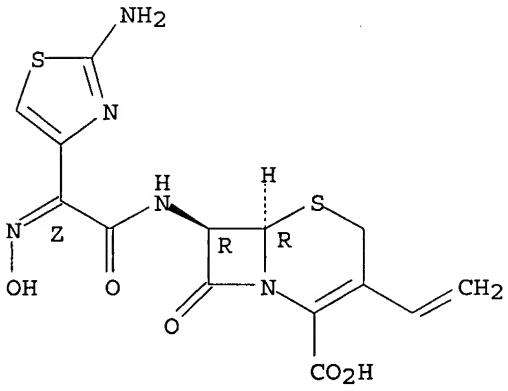
● x HCl

RN 122224-49-1 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, [6R-[6α,7β(Z)]]-, sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

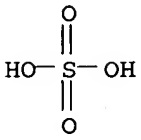
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 7664-93-9
CMF H2 O4 S

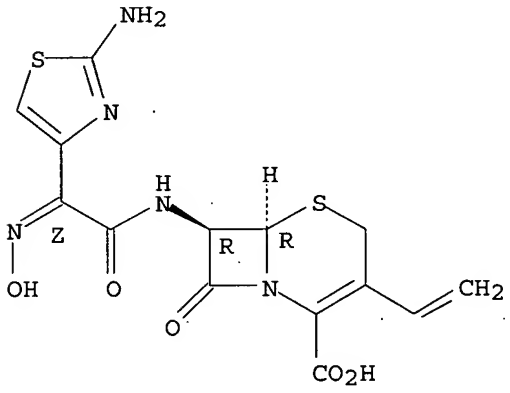


RN 122224-50-4 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, [6R-[6α,7β(Z)]]-, methanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

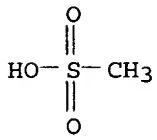
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 75-75-2
CMF C H4 O3 S

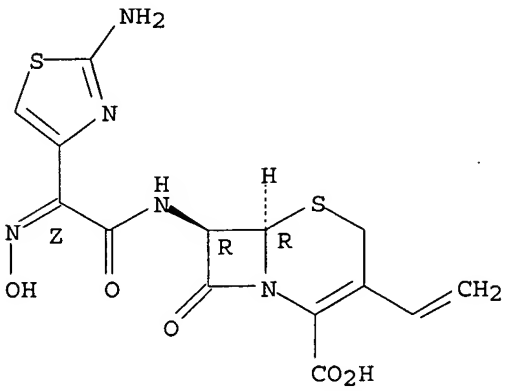


RN 122224-51-5 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, [6R-[6α,7β(Z)]]-, [3-(formylhydroxyamino)propyl]phosphonate (salt) (9CI) (CA INDEX NAME)

CM 1

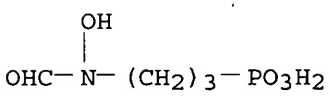
CRN 91832-40-5
CMF C14 H13 N5 O5 S2

Absolute stereochemistry.
Double bond geometry as shown.



CM 2

CRN 66508-53-0
CMF C4 H10 N O5 P



L7 ANSWER 26 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:530505 CAPLUS
DOCUMENT NUMBER: 101:130505
TITLE: 7-Substituted 3-vinyl-3-cephem compounds
INVENTOR(S): Takaya, Takao; Takasugi, Hisashi; Masugi, Takashi; Yamanaka, Hideaki; Kawabata, Kohji
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd. , Japan
SOURCE: Belg., 44 pp.
CODEN: BEXXAL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 897864	A1	19840329	BE 1983-211603	19830929
ZA 8306918	A	19840530	ZA 1983-6918	19830916
DK 8304270	A	19840331	DK 1983-4270	19830919
DK 162718	B	19911202		
DK 162718	C	19920511		
AU 8319277	A1	19840405	AU 1983-19277	19830920
AU 576735	B2	19880908		
FI 8303370	A	19840331	FI 1983-3370	19830921
FI 74971	B	19871231		

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

FI 74971	C	19880411			
GB 2127812	A1	19840418	GB 1983-25572		19830923
GB 2127812	B2	19860108			
AT 8303427	A	19860315	AT 1983-3427		19830927
AT 381497	B	19861027			
EP 105459	A2	19840418	EP 1983-109661		19830928
EP 105459	A3	19850619			
EP 105459	B1	19890322			
R: DE, LU, NL, SE					
CH 657857	A	19860930	CH 1983-5257		19830928
NO 8303531	A	19840402	NO 1983-3531		19830929
NO 160080	B	19881128			
NO 160080	C	19890308			
FR 2533926	A1	19840406	FR 1983-15515		19830929
FR 2533926	B1	19860502			
HU 31737	O	19840528	HU 1983-3401		19830929
HU 190166	B	19860828			
ES 526091	A1	19851001	ES 1983-526091		19830929
CA 1206956	A1	19860701	CA 1983-437938		19830929
SU 1309911	A3	19870507	SU 1983-3649764		19830929
JP 59089689	A2	19840523	JP 1983-184036		19830930
JP 01049273	B4	19891024			
JP 59089690	A2	19840523	JP 1983-184037		19830930
US 4559334	A	19851217	US 1983-543880		19831020
ES 543013	A1	19871016	ES 1985-543013		19850510
AT 8503554	A	19871115	AT 1985-3554		19851209
AT 385994	B	19880610			
JP 62294687	A2	19871222	JP 1987-95698		19870417
JP 06057713	B4	19940803			
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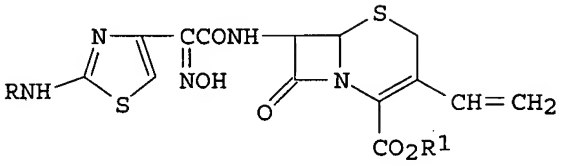
			GB 1983-23034	A	19830826
			US 1980-205334	A2	19801110
			AT 1983-3427	A	19830927

OTHER SOURCE(S): CASREACT 101:130505; MARPAT 101:130505

GI



I

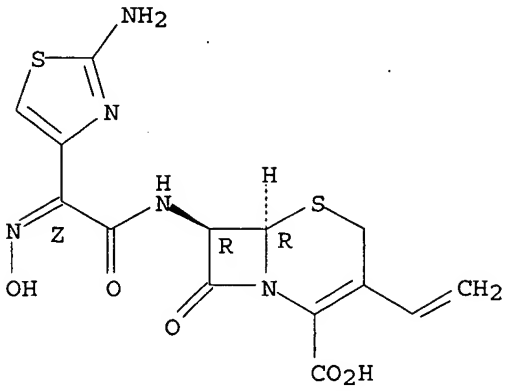
AB Cephalosporins I (R, R1 = H, protective group) were prepared Thus benzhydryl 7-amino-3-vinyl-3-cephem-4-carboxylate was treated with BrCH2COCH2COBr, followed by oximation and treatment with thiourea to give I (R = H, R1 = CHPh2) which was saponified and treated with DL-EtO2COCHMeI to give I (R = H, R1 = CHMeOCO2Et, II). II was excreted in the urine approx. half as fast as I (R = H, R1 = CH2O2CCMe3).

IT **91832-41-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(esterification of).

RN 91832-41-6 CAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-, monopotassium salt, (6R,7R)- (9CI) (CA INDEX NAME)

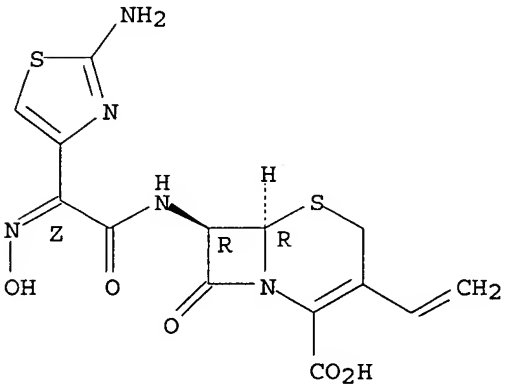
Absolute stereochemistry.
Double bond geometry as shown.



● K

IT **91832-39-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and urinary excretion of)
RN 91832-39-2 CAPLUS
CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
7-[[(2Z)-(2-amino-4-thiazolyl)(hydroxyimino)acetyl]amino]-3-ethenyl-8-oxo-
, monosodium salt, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



● Na

=> fil caold;s 17

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	133.32	357.19

Prepared by: Mary Hale @2-2507 Rem Bldg 1D86

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)        SINCE FILE      TOTAL
                                                     ENTRY    SESSION
CA SUBSCRIBER PRICE                                -19.50     -19.50

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FILE LAST UPDATED:  01 May 1997 (19970501/UP)

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L8            0 L6

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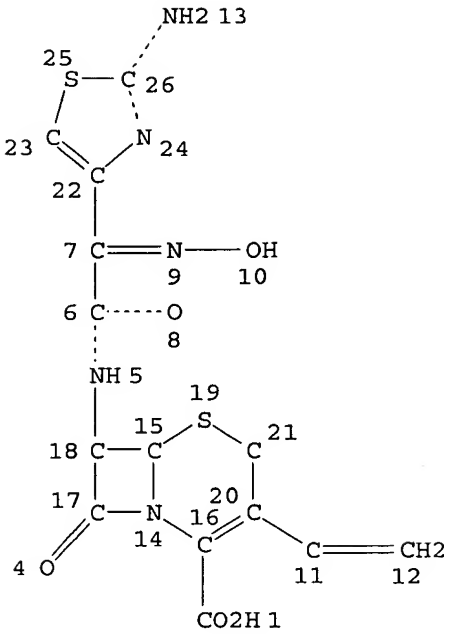

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DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS 24

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FULL SUBSET SCREEN SEARCH COMPLETED 33 ANSWERS
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.44	357.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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